

DATA ITEM DESCRIPTION	2 IDENTIFICATION NO(S)	
	AGENCY	NUMBER
1. TITLE GRAPHIC ILLUSTRATION CHART	USAF	DI-CMAN-80038
3. DESCRIPTION/PURPOSE This chart reflects the contractor's recommended list of items to be selected for Configuration Management by the Air Force. The Air Force approved Graphic Illustration chart will be used to identify and control the data to be delivered to the Air Force for use in the advanced Configuration Management System (ACMS)	4. APPROVAL DATE 8 July 1985	
	5. OFFICE OF PRIMARY RESPONSIBILITY	
	6. DDC REQUIRED	
	7. APPROVAL LIMITATION	
7. APPLICATION/INTERRELATIONSHIP This Data Item Description (DID) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement for this data included in the contract. This DID is used in conjunction with DIDs DI-E-3110C and DI-E-3109B. This DID supersedes DI-E-30158	8. REFERENCES (Mandatory as cited in Block 10)	
	MCSL NUMBER(S) F3640	
10. PREPARATION INSTRUCTIONS 10.0 <u>Contract</u> . This data item is generated by the contract which contains a specific and discrete work task to develop this data project. 10.1 <u>Definitions</u> . Terms used here are defined in DI-E-3109B 10.2 <u>Procedures</u> . The Graphic Illustration Chart shall be initiated and provided by part number for each contract End Item selected by the Air Force for Configuration Management in the Advanced Configuration Management System. The chart will depict by part number and indenture the relationship of each selected component to its next higher assembly up to and including the contract end item. Figure 1, attached, is the illustrated format of the Graphic Illustration Chart. The scope of coverage shall be the Weapon System, its component contract end items (AVE), and those contract end items of AGE which are recommended for Configuration Management. The depth of coverage, considering each branch of engineering drawing tree, will include all serialized second indenture components. In addition, Configuration Management will extend down to and include one level above the highest item designated to be returned to a Special Repair Activity (SRA) for repair as identified by the Maintenance Analysis. Exceptions to the above criteria are as follows: (a) All time significant items and all indentures of assembly above these items up to and including the contract end items will be shown on this chart. (b) Special Equipment (i.e., DMGE, CILI, and CIL) - the scope of coverage shall include the end items plus those "operational components" installed therein which have been selected for Configuration Management when installed in their operational environment. (c) All Real Property Installed Equipment (RPTE), Air Force Standards (AFS), and expendable items will be excluded from this data requirement. All items reflected in the Graphic Illustration Chart, must be serialized in accordance with the applicable serialization requirements as called for within the contract. The preparation and		

Preparation Instructions (Continued)

submission of the Graphic Illustration Chart will be accomplished as soon as all necessary data is available.

10.3 Initial Submittal - Each associated contractor will forward Graphic Illustration Charts to the appropriate ALC for Air Force approval. The ALC will review charts and, through coordination with affected contractors, approve and/or adjust as necessary. A copy of the ALC approved charts will be returned to the associate contractor for use in preparation of Component Operational Data Notices.

10.4 Updating - This effort, as shown below, will be accomplished as specified by the DD Form 1423.

10.4.1 The addition or deletion of an item or a change to configuration Management application will require updated Graphic Illustration Charts be submitted to the applicable ALC for Air Force approval. In this Identification Number, the serial number effectivity denoting the earliest production unit on which the associate contractor can accomplish the revised Configuration Management application. Approval will be handled in the same manner as "Initial Submittal" approval.

10.4.2 Changes to a part number resulting from modification (ECP/TCIO) will require an updated Graphic Illustration Chart be submitted to the applicable ALC for information, which will include the ECP/TCIO creating the changes.

10.5 Preparation of Graphic Illustration Chart - See Figure 1 and 2 for illustrations.

10.6 Part Number - Twenty columns. Enter the hardware part number. The part number entry of each line will start in the column that indicates its proper indenture or setback in relation to the Contract End Item in which it is installed. For items of the Aerospace Vehicle (AVE) i.e., missile will be the indenture one Contract End item. The other Contract End Items that are assembled into the missile, e.g., Rocket Motors, Guidance Units, Control Units, etc., will be indenture two, three, etc. See Figure 1. Setback or indenture shall be based upon the removable/replaceable capability of assembly, as identified by the Form "C" Maintenance Analysis. Source Control Drawing numbers or Production Assembly Drawing numbers should never be used here.

10.7 Optional to Line - Column. Used only when components of a Contract End Item are optional (interchangeable) to each other. Enter the line number of the line on which the part number of the optional item appears. If a Contract End Item can be used with either of two power supplies installed on an optional basis then these will be indicated as optional to each other in this column. If one power supply is called out on line 6 and the other on line 12, the entry in this optional column on line 6 will be "12" and the entry on line 12 will be "6".

10.8 Part Noun or Nomenclature - Twelve Columns. Enter from left to right, the basic noun for the item as shown in Handbook H6-1 (Cataloging Handbook, Federal Item Identification Guide for Supply Cataloging).

10.9 CODN Type - Column. Enter in this column the applicable alpha character A, B, or C, which describes the characteristics of the item. The same code will be used on the CODN. (See DI-E-3110C).

<u>CODE</u>	<u>CHARACTERISTIC</u>
A	-6 Time Change Item. Item is subject to mandatory removal and is listed in the replacement of the -6- Inspection Manual.
B	Non -6 Time Significant Item. Item is time significant but not listed in -6 Inspection Manual.
C	All other items selected for configuration accounting.

NOTE: (1) The Planned Field Maintenance actions must be considered when entering the Type Document Code in the CODN. When a time change item is not the level that will be removed and/or replaced at the field, the entry on all CODNs for higher assemblies up to and including the planned replacement level, will be the A or B code as applicable to the time significant item. The "replacement interval" of the planned replacement level assembly shall be the same as that of the time change component within it. A "replacement interval" of "999999" will never be used for a type document code A.

NOTE: (2) The OCL hardware may be coded C type CODN if the level itself is not time significant.

Surveillance Only - column. Enter a check mark in this column if the item is non-6 item significant item, otherwise leave blank. A check in this column is required when a B type CODN code is entered in the CODN type column.

-6 Item - column. Enter a check mark in this column if the item is an Air Force approved Time Removal Item in the -6 Inspection Manual, otherwise leave blank. A check in this column is required when an A type CODN code is entered in the CODN type column.

10.10 Selected Item Configuration Records - Three columns. Enter a check mark in the appropriate column. (DI-E-3109B)

10.10.1 End Item Record (41card) column. Enter a check mark in this column if the item has a setback of one.

10.10.2 Component Record (42 card) column. Place a check mark in this column for all components.

10.10.3 Historical Record (43 card) column. Enter a check mark in this column if the item is coded A or B in the CODN type column.

10.11 Q.P.A (Quantity Per Application) - Column. Enter the number of these components used in each application in the Contract End Item.

10.12 Operation Code - three column. If the item is a time significant item, enter the applicable operation code or codes; if not time significant, leave blank. (See Note 1). Additional operation codes for a weapon support system will be provided by the AFLC SSM if required. If two or more operation codes are applicable, enter the second code on the next line below and so on until all applicable codes are listed for the item. These same codes are used on the CODN. (DI-F-3110C)

NOTE:1 10.12.1 In all cases the following codes will be used:

10.12.1.1.	111 - Strategic alert or normal operation
10.12.1.2.	222 - Test in process
10.12.1.3	333 - Calibration in process
10.12.1.4	444 - No go or nonoperating
10.12.1.5	555 - Targeting
10.12.1.6	666 - Stops
10.12.1.7	777 - Calendar shelf life
10.12.1.8	888 - Calendar installed life
10.12.1.9	999 - Calendar combined shelf and installed life

NOTE:2 10.12.2 When an item is subject to replacement at both calendar and time/cycle intervals, the entries pertaining to the time/cycle data shall be listed first.

10.13 Replacement Interval - Six columns. For the -6 time significant items, CODN type A, enter from right to left, the replacement interval as found in the replacement schedule of the -6 Inspection Manual. Insert zeros in the unused positions to the left. For the non-6 time significant items, CODN type B, enter the value "999999". A replacement interval entry is required for each operation code listed to its left. For items listed for configuration purposes only, CODN type C, leave the operation code, replacement interval, and time unit columns blank.

NOTE:3 In those cases where more than 6 digits are required to report an item's replacement interval, the code K will be entered into the last position (right) of the field and will indicate that the remaining numeric portion is to be multiplied by 1000. Value "999999" will never be used to express replacement interval value for CODN type A items. Mandatory removal items must have an actual time value, and 9's are treated as blanks for computation projections of items due for removal.

Preparation Instructions (Continued)

10.14. Time Unit - Column. Enter the Time Unit code, which applies to operation code and replacement interval. Type of time units will be assigned in line with the following philosophy.

10.14.1 Normally only one code will be used to indicate the unit of time by which usage is measured. However, provision is made to identify with different codes, two different rates of degradation that are measured in like units. Example: An item may deteriorate at different rates of degradation depending on whether it undergoes a "wet" cycle or "dry" cycle. If the item's designed objective is to operate under "wet" cycle, then deterioration caused by "wet" cycle usage, if it differs from "dry" cycle deterioration, shall be considered the normal rate of degradation.

10.14.2 The "dry" cycle would thus be measured by a separate rate of degradation. Rates of degradation and codes to indicate them are listed as follows:

Assigned Units:

10.14.2.1 Time/Cycle Codes

Degradation	Sec	Min	Hrs	Cycles	Miles
Normal Rate	S	M	H	C	K
Second Rate	Z	P	B	X	K

10.14.2.2 Calendar Life Codes

D - Days
T - Months

10.15 Part Manufacturers Code - Five columns. Enter the code as it appears in Handbook H4-1 Federal Supply Code for Manufacturers. This same code appears on the CODN.

10.16 Work Unit Code - Five Columns. Enter here the work unit code for the item as it appears in the -06 Work Unit Code Manual.

10.17 Chart Legend - Across the bottom enter the applicable Operational Control level (OCL) noun, OCL part Number, Configuration Item Identification number, and Part Number.

10.17.1 OCL Noun - Enter the noun or abbreviation that best describes the OCL, such as, missile; LF for Launch Facility; LCF for Launch Control Facility, etc.

Preparation Instructions (Continued)

- 10.17.2 Configuration Item Identification Number - Enter the seven-digit numeric-alpha provided by ALC/RMD/Contractor.
- 10.17.3 CII Part Number - Enter the manufacturer's part number for the End Item.

DI-CMAN-80038

LINE NO.	PART NUMBER							OPTIONAL TO LINE NO	NOMENCLATURE OR PART NOUN	CODN TYPE	SURV ONLY	-6 ITEM	41 EPOE	42 COMP ID	43 HIST	QTY PER APP	OPERATION CODE	REPLACE MENT INTERVAL	UNIT	WORK UNIT CODE	LINE NO.
	0	1	2	3	4	5	6 7														
1.	8	0	5	0	0	0	0-120		ACCLRM	C			X			1					1.
2.	8	0	4	9	9	9	0-120		CYRO, PNDLUS	C			X			1					2.
3.	8	0	4	9	9	4	0-060		PLATF, PIGA	C			X			1					3.
4.	8	0	4	9	9	2	0-060		DRVR, INP AXS	C			X			1					4.
5.	8	0	4	9	9	0	0-030		BRG, T_SFT/TM	C			X			1					5.
6.	8	0	4	9	8	9	1-010		TRO, MOT, BLMS	C			X			1					6.
7.	8	0	4	9	8	9	4-030		BRG, T-SFT	C			X			1					7.
8.	8	0	5	0	0	9	5-010		BRG. ASSEM	C			X			1					8.
9.	8	0	4	9	9	2	1-020		RSLVR	C			X			1					9.
10.	8	0	4	9	9	7	0-050		NORM. PIC	C			X			1					10.
11.	8	0	5	0	0	1	0-030		16 PIC	C			X			1					11.

OCL Missile

OCL P/N

CII 0041008

CII P/N

8050000-120

FIG 1

LINE NO.	PART NUMBER							OPTIONAL TO LINE NO.	NOMENCLATURE OR PART NOUN	CODN TYPE	SURV ONLY	-6 ITEM	41 EPOE	42 COMP ID	43 HIST	QTY PER APP	OPERATION CODE	REPLACE MENT INTERVAL	UNIT	WORK UNIT CODE	LINE NO.
	0	1	2	3	4	5	6														

- ① Items are listed according to indenture level as derived by present maintenance concepts.
- ② Shows optional items according to the line number on which the item part number appears.
- ③ This column contains the part noun which best describes the item. If the part noun exceeds digits, it will be abbreviated according to MIL-STD-128.
- ④ Shows the CODN type applicable to each item listed in 1. The CODN types used are:
- A. A -6 TO Time/Cycle Significant Item, including Calendar Time Significant
- B. A Non -6 TO Time/Cycle Significant Item usually "Surveillance Only"
- C. Selected Configuration Items
- ⑤ "Surveillance Only" column indicates items on which time accountability required for potential mandatory replacement or product improvement data.
- ⑥ The "-6" is checked to indicate a time significant item which must be replaced at a specified number of calendar months, operating time and/or cycles.
- ⑦ Selected item configuration records required for each item are indicated by a checkmark in the appropriate block.
- ⑧ QPA - Quantity per assembly.
- ⑨ The operating codes are shown for each item as they appear on the CODN for that particular item and are for information only.
- ⑩ The "Replace Every" shown applies to the corresponding operation code for each item and is information only.
- ⑪ Time units are shown for each "Replace Every". The units used are: H-Hours, C-Cycles, T-Months, and are for information only.
- ⑫ The work Unit Code as it is shown in the -06 Work Unit Code Manual for this line item is entered here.
- ⑬ The applicable Operational Control Level (OCL) is listed for the CII and its components.
- ⑭ Applicable CII number is shown.
- ⑮ The configuration item identification part number.

OCL 13 OCL P/N 13 CII 14 CII P/N 15

DATE _____

PAGE NO _____

FIG 2